

WEST**Generate Collection****Search Results - Record(s) 1 through 2 of 2 returned.** **1. Document ID: US 6001395 A**

L20: Entry 1 of 2

File: USPT

Dec 14, 1999

US-PAT-NO: 6001395

DOCUMENT-IDENTIFIER: US 6001395 A

TITLE: Polymeric lamellar substrate particles for drug delivery

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KMC](#) | [Drawn Desc](#) | [Image](#) **2. Document ID: US 5672350 A**

L20: Entry 2 of 2

File: USPT

Sep 30, 1997

US-PAT-NO: 5672350

DOCUMENT-IDENTIFIER: US 5672350 A

TITLE: Recombinant bovine coronavirus E2 and E3 polypeptides and vaccines

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KMC](#) | [Drawn Desc](#) | [Image](#)**Generate Collection**

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L24: Entry 5 of 11

File: USPT

Jun 17, 1997

DOCUMENT-IDENTIFIER: US 5639473 A

TITLE: Methods for the preparation of nucleic acids for in vivo delivery

CLPR:

1. A method for the preparation of articles for in vivo delivery of nucleic acid constructs, said method comprising subjecting aqueous medium containing biocompatible material capable of being crosslinked by disulfide bonds and nucleic acid construct to high intensity ultrasound conditions for a time sufficient to promote crosslinking of said biocompatible material by disulfide bonds;

CLPR:

3. The method according to claim 2, wherein said naturally occurring polymer is selected from proteins containing sulfhydryl groups and/or disulfide groups, polypeptides containing sulfhydryl groups and/or disulfide groups, lipids containing sulfhydryl groups and/or disulfide groups, polynucleic acids containing sulfhydryl groups and/or disulfide groups, or polysaccharides containing sulfhydryl groups and/or disulfide groups.

CLPR:

4. The method according to claim 3, wherein said protein is selected from hemoglobin, myoglobin, albumin, insulin, lysozyme, immunoglobulins, alpha-2-macroglobulin, fibronectin, vitronectin, fibrinogen, or combinations of any two or more thereof.

CLPR:

5. The method according to claim 4, wherein said protein is albumin.

CLPR:

6. The method according to claim 4, wherein said protein is hemoglobin.

CLPR:

7. The method according to claim 4, wherein said protein is a combination of albumin and hemoglobin.

CLPR:

9. The method according to claim 2, wherein said synthetic polymer is selected from synthetic polyamino acids containing cysteine residues and/or disulfide groups, synthetic polypeptides containing sulfhydryl groups and/or disulfide groups, polyvinyl alcohol modified to contain free sulfhydryl groups and/or disulfide groups, polyhydroxyethyl methacrylate modified to contain free sulfhydryl groups and/or disulfide groups, polyacrylic acid modified to contain free sulfhydryl groups and/or disulfide groups, polyethyloxazoline modified to contain free sulfhydryl groups and/or disulfide groups, polyacrylamide modified to contain free sulfhydryl groups and/or disulfide groups, polyvinyl pyrrolidinone modified to contain free sulfhydryl groups and/or disulfide groups, polyalkylene glycols modified to contain free sulfhydryl groups and/or disulfide groups, as well as mixtures of any two or more thereof.

CLPR:

10. The method according to claim 1, wherein said polymeric shell is modified by a suitable agent, wherein said suitable agent is selected from a synthetic polymer, phospholipid, a protein, a polysaccharide, a surface active agent, a chemical modifying agent, or combination thereof, wherein said agent is associated with said polymeric shell through an optional covalent linkage.

CLPR:

11. The method according to claim 10, wherein said synthetic polymer is selected from polyalkylene glycols, polyvinyl alcohol, polyhydroxyethyl methacrylate, polyacrylic acid, polyethyloxazoline, polyacrylamide, or polyvinyl pyrrolidinone.

CLPR:

13. The method according to claim 10, wherein said protein is selected from an enzyme or antibody.

CLPR:

16. The method according to claim 1, wherein said nucleic acid constructs are selected from IGF-1 encoding sequence, Factor VIII encoding sequence, Factor IX encoding sequence, or antisense nucleotide sequences.

CLPR:

17. The method according to claim 16, wherein said nucleic acid construct is an IGF-1 encoding sequence.

CLPR:

18. The method according to claim 16, wherein said nucleic acid construct is a Factor VIII encoding sequence.

CLPR:

19. The method according to claim 16, wherein said nucleic acid construct is a Factor IX encoding sequence.

CLPR:

20. The method according to claim 16, wherein said nucleic acid construct is an antisense nucleotide sequence.

CLPR:

21. The method according to claim 1, wherein said nucleic acid construct within said shell is dissolved or suspended in a biocompatible dispersing agent.

CLPR:

22. The method according to claim 21, wherein said biocompatible dispersing agent is selected from soybean oil, coconut oil, olive oil, safflower oil, cotton seed oil, aliphatic, cycloaliphatic or aromatic hydrocarbons having 4-30 carbon atoms, aliphatic or aromatic alcohols having 2-30 carbon atoms, aliphatic or aromatic esters having 2-30 carbon atoms, alkyl, aryl, or cyclic ethers having 2-30 carbon atoms, alkyl or aryl halides having 1-30 carbon atoms, optionally having more than one halogen substituent, ketones having 3-30 carbon atoms, polyalkylene glycol, or combinations of any two or more thereof.

CLPR:

25. The method according to claim 1, wherein said polymeric shell containing said nucleic acid construct is suspended in a biocompatible medium, and wherein said biocompatible medium is selected from water, buffered aqueous media, saline, buffered saline, solutions of amino acids, solutions of proteins, solutions of sugars, solutions of vitamins, solutions of carbohydrates, solutions of synthetic polymers, lipid-containing emulsions, or combinations of any two or more thereof.

CLPR:

26. A method for the delivery of a nucleic acid construct to a subject in need thereof, said method comprising administering to said subject an article prepared by the method of claim 1 by oral, intravenous, subcutaneous, intraperitoneal, intraperitoneal, intrathecal, intramuscular, intracranial, inhalational, topical, transdermal, suppository (rectal), or pessary (vaginal) routes of administration.

CLPV:

wherein said nucleic acid construct is substantially completely contained within a polymeric shell, and

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Search Results - Record(s) 1 through 50 of 66 returned.

 1. Document ID: US 6139843 A

L12: Entry 1 of 66

File: USPT

Oct 31, 2000

DOCUMENT-IDENTIFIER: US 6139843 A

TITLE: Peptide compositions for the treatment of HIV

DEPR:

The peptide-carrier conjugates of this invention may be administered in vaccine form, suppository form, intradermally, subcutaneously, orally, or by any other suitable route. The vaccines may be administered in any suitable form including liquid form, or in timed-release, pulse-release or slow-release mechanisms, such as virosomes. Virosomes encase viral-specific antigens in their systems and then react strongly with macrophages. Such virosomes may comprise 1-10 mg of PND peptide coupled to PPD or influenza hemagglutinin (HA), or PND in a free state associated with but not covalently coupled with PPD or HA, 1-10 mg of HA isolated from a human strain of influenza virus, 0.1-1 mg neuraminidase (NA) isolated from a human strain of influenza virus, 0.25-0.75 mg kephalin and 100-140 mg lecithin.

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KMC](#) | [Draw Desc](#) | [Image](#) 2. Document ID: US 6099853 A

L12: Entry 2 of 66

File: USPT

Aug 8, 2000

DOCUMENT-IDENTIFIER: US 6099853 A

TITLE: Vaginal suppository vaccine for urogenital infections

ABPL:

This invention is directed to a suppository-based vaccine delivery system for immunizing against urogenital infectious disease in humans and a method for treating same. More particularly, this invention is directed to a suppository-based vaccine delivery system for the prophylaxis against urogenital infectious diseases, such as urinary tract infections. The suppository-based vaccine delivery system is comprised of a vaccine comprised of inactivated bacteria which originate from cultures of 8 to 14 uropathogenic bacteria strains of the species: Escherichia coli, Klebsiella pneumoniae, Proteus mirabilis, Proteus morganii, and Streptococcus faecalis; and polyethylene glycol suppository base; wherein the suppository is adapted to be inserted into a bodily orifice of a human so as to allow the suppository to be in contact with tissue of the bodily orifice to facilitate transfer of suppository material therethrough.

BSPR:

The present invention relates generally to a system and method for treating disease in humans, specifically a prophylactic treatment of urogenital infections in humans. More particularly, the invention relates to a suppository-based, intravaginal vaccine delivery system for prophylaxis against urinary tract infections in humans, wherein the suppository is comprised of a vaccine derived from whole or fractionated pathogenic microorganisms. Still more particularly, the present invention relates to a suppository based delivery system for

prophylaxis against recurrent urinary tract infections in humans, wherein the suppository is comprised of a vaccine of whole, inactivated bacteria which originate from cultures of 4 to 20 uropathogenic bacterial strains isolated from the urine of persons suffering urinary tract infections, and which include a

BSPR:

The subject invention overcomes the above limitations and others, and teaches a suppository-based vaccine delivery system for prophylaxis against urogenital infectious diseases, such as urinary tract infections.

BSPR:

According to the present invention, there is provided a intravaginally administered suppository-based vaccine delivery system for prophylaxis against urogenital infectious diseases, such as urinary tract infections.

BSPR:

Further according to the present invention, there is provided a suppository-based vaccine delivery system for the prophylaxis against urogenital infectious diseases, such as urinary tract infections wherein the vaccine is in contact with the vaginal mucous membrane for a sufficient period of time to enhance the immune response.

BSPR:

Still further according to the present invention, there is provided a suppository-based vaccine delivery system for the prophylaxis against urogenital infectious diseases, such as urinary tract infections, wherein the vaccine is easily administered, does not require the patient to lie in a supine position for an extended period of time after receiving the vaccination, and is suitably administered by the patient for primary and routine booster requirements.

BSPR:

Still further according to the present invention, there is provided a suppository-based vaccine delivery system for prophylaxis against urogenital infectious diseases, such as urinary tract infections in humans, said suppository comprising: a vaccine comprised of inactivated bacteria which originate from cultures of 8 to 14 uropathogenic bacteria strains isolated from the urine of persons suffering from a urinary tract infection of the species: Escherichia coli, Klebsiella pneumoniae, Proteus mirabilis, Proteus morganii, and Streptococcus faecalis, and are present in an amount of about 50 million to about 5 billion germs of each strain per suppository, wherein one-half to three-quarters of the strains used belong to Escherichia coli species; and polyethylene glycol suppository base; wherein the suppository is adapted to be inserted vaginally so as to allow the suppository to be in contact with vaginal mucous membrane to facilitate transfer of suppository material therethrough.

BSPR:

An advantage of the present invention is the provision of a suppository-based vaccine delivery system for the prophylaxis against urogenital infectious diseases, such as urinary tract infections, wherein the vaccine is in contact with the vaginal mucous membrane for a sufficient period of time to enhance the immune response.

BSPR:

Another advantage of the present invention is the provision of a suppository-based vaccine delivery system for the prophylaxis against urogenital infectious diseases, such as urinary tract infections, wherein the vaccine is easily administered, and does not require the patient to be in a supine position for an extended period of time after receiving the vaccination.

BSPR:

Another advantage of the present invention is the provision of a suppository-based vaccine delivery system wherein the vaccine is suitably administered by the patient.

BSPR:

Another advantage of the present invention is the provision of a suppository-based vaccine delivery system wherein the administration of the vaccine is relatively painless.

BSPR:

Yet another advantage of the present invention is the provision of a suppository-based vaccine delivery system wherein sIgA-specific stimulation from mucosal vaccination allows immune responses to specifically keep bacterial colonization from occurring, instead of fighting the infection once it has colonized.

BSPR:

Yet another advantage of the present invention is the provision of a suppository-based vaccine delivery system wherein the patient may self-administer booster vaccinations periodically.

DEPR:

This invention is directed to a suppository-based vaccine delivery system for immunizing against infectious disease in humans and a method for treating same. More particularly, this invention is directed to a suppository-based vaccine delivery system for the prophylaxis against urogenital infectious diseases, such as urinary tract infections. The suppository-based vaccine delivery system is comprised of a vaccine comprised of inactivated bacteria which originate from cultures of 8 to 14 uropathogenic bacteria strains of the species: Escherichia coli, Klebsiella pneumoniae, Proteus mirabilis, Proteus morganii, and Streptococcus faecalis; and polyethylene glycol suppository base; wherein the suppository is adapted to be inserted into a bodily orifice of a human so as to allow the suppository to be in contact with tissue of the bodily orifice to facilitate transfer of suppository material therethrough.

DEPR:

The suppository is comprised of a vaccine comprised of inactivated bacteria which originate from cultures of 8 to 14 uropathogenic bacteria strains of the species: Escherichia coli, Klebsiella pneumoniae, Proteus mirabilis, Proteus morganii, and Streptococcus faecalis. The inactivated bacteria are present in an amount of about 50 million to about 5 billion germs of each strain per suppository and one half to three-quarters of the strains used belong to the Escherichia coli species. Preferably, the inactive bacteria originate from 6 strains of the species Escherichia coli and 1 strain each of Klebsiella pneumoniae, Proteus mirabilis, Proteus morganii, and Streptococcus faecalis. In a preferred embodiment, the inactive bacteria are present in the total amount of about 1.0×10^9 to about 1.0×10^{10} germs.

DEPR:

The suppository is comprised of a vaccine which is prepared according to the method described in U.S. Pat. No. 4,606,919, which is incorporated by reference in its entirety. The vaccine is prepared by culturing, by themselves on a suitable nutrient medium, each of the above mentioned 8 to 14 uropathogenic bacteria strains which have been isolated from the urine of persons suffering from an infection of the urinary tract and, when culturing is concluded, removing the particular biological material formed and inactivating it by known methods, mixing amounts of the inactivated bacteria obtained from the individual strains with one another and diluting the mixture with an amount of a sterile isotonic solution such that about 50 million to 5 billion germs of each strain are present per suppository.

DEPR:

The polyethylene glycol suppository base is present in the suppository-based vaccine delivery system in any suitable amount so as to allow the vaccine to be in contact with the vaginal mucous membrane for a sufficient period of time to enhance the immune response. Preferably, the polyethylene glycol suppository base comprises from about 80% to 95% by weight of the suppository. The polyethylene glycol suppository base confers a degree of miscibleness with the mucous membrane surfaces of the vagina, wherein suspended particles of the vaccine are in contact with such mucous membrane surfaces for a sufficient amount of time to elicit a secretory immunoglobulin response. The polyethylene glycol suppository base has an adjuvant effect which enhances the immune response by allowing the vaccine to facilitate contact time with the vaginal mucous membranes, serving as a depot that slowly releases antigen, and by localizing and delivering antigens to immunocompetent cells. The polyethylene glycol suppository base further functions as a structural necessity which keeps the suppository in its molded form.

DEPR:

The suppository-based vaccine system suitably further comprises depolarized gelatin. The depolarized gelatin is any suitable depolarized gelatin known in the art. Example of suitable depolarized gelatin materials include, but are not limited to, Type A or B gelatin from bovine or porcine collagen. Preferably, the depolarized gelatin is Type A gelatin. The depolarized gelatin serves to protect components during lyophilization.

DEPR:

The suppository-based vaccine system suitably further comprises thimerosal. The thimerosal is antimicrobial preservative. A suitable commercially available thimerosal is available from Sigma Chemical Co. The thimerosal is present in the suppository in any suitable amount. More particularly, the suppository is comprised of from about 0.0005% to about 0.005% by weight thimerosal.

DEPR:

The suppository-based vaccine delivery system of the present invention is prepared under an aseptically sterile laminar flowhood. The polyethylene glycol suppository base is heated to a temperature of about 80.degree. C. such that the polyethylene glycol becomes liquefied. The polyethylene glycol suppository base is heated for about 1 hour. The vaccine comprised of 8 to 14 strains of inactivated lyophilized uropathogenic bacteria is placed in a flask. A portion of the liquid suppository base is cooled to 60.degree. C. and poured into individual flasks containing the vaccine. The vaccine and the liquid suppository base are stirred for about 10 minutes at a temperature of about 60.degree. C. forming a homogeneous suspension comprised of the suppository base and the vaccine. The suspension comprised of the suppository base and the vaccine is placed into individual laminate suppository shells. An additional amount of liquid suppository base is added to the flask which contains residue of vaccine. The suppository base and the vaccine are stirred for about 1 minute at a temperature of 60.degree. C. to form a homogeneous suspension. This suspension is added to the lambaste suppository shell. Pure liquid suppository base is added to the top of the laminate suppository shell until the shell is filled. The suppository is cooled at a temperature of about 24.degree. C. allowing the suppository base to harden. This method ensures that the active vaccine materials are located in the bottom 67% of the suppository where it is protected from the cracking or flaking that may occur in the tip of the suppository when shells are opened for use.

DEPR:

The present invention is further exemplified in the following example. The example illustrates the effectiveness of the suppository-based vaccine delivery system of the present invention. It is understood that the example is only illustrative of preferred embodiments according to the present invention wherein the claims set forth the scope of the present invention.

DEPR:

A suppository-based vaccine delivery system comprised of a vaccine comprised of inactivated bacteria which originate from cultures of 8 to 14 uropathogenic bacteria strains isolated from the urine of persons suffering from a urinary tract infection of the species: Escherichia coli, Klebsiella pneumoniae, Proteus mirabilis, Proteus morganii, and Streptococcus faecalis, and are present in an amount of about 50 million to about 5 billion germs of each strain per suppository, wherein one-half to three-quarters of the strains used belong to Escherichia coli species; and polyethylene glycol suppository base; was prepared.

DEPR:

POLYBASE, a polyethylene glycol suppository base manufactured by Paddock Laboratories, Inc., was heated to a temperature of 80.degree. C. for about one hour to liquefy the suppository base. Lyophilized SOLCOUROVAC.RTM. vaccine manufactured by Solco Basel AG, was aseptically placed in a sterile Erlenmeyer flask, enough to manufacture 50 suppositories. Each suppository will contain from about 1.times.10.sup.9 to about 1.times.10.sup.10 germs. The liquid suppository base was cooled to about 60.degree. C. and approximately 100 ml of liquid suppository base was poured into the individual flasks containing the vaccine. A sterile magnetic stir bar was placed in the flask, and the vaccine and suppository base were stirred for about 10 minutes at approximately 60.degree. C. in a temperature controlled water bath to form a homogeneous suspension. The suspension comprised of the suppository base and the vaccine was placed into individual polyvinyl chloride-polyethylene laminate suppository shell using a

sterile pipette. Approximately 2.0 ml of the suspension was placed into each shell.

DEPR:

Approximately 25 ml of liquid suppository base is added to the flask which contained residue of the vaccine. The suppository base and the vaccine were stirred for about 1 minute at a temperature of about 60.degree. C. to form a homogeneous suspension. Approximately 0.5 ml of this suspension was added to each shell. Pure liquid suppository base was added to each shell to fill the shell. The suppository base was cooled at a temperature of about 24.degree. C. for about 30 minutes to harden the suppository base. The suppositories were then stored at 4.degree. C.

DEPR:

The 91 patients were divided into three treatment groups. Group 1 received suppositories containing about 1.times.10.sup.9 germs per suppository. Group 2 received suppositories containing about 2.times.10.sup.9 germs per suppository. Group 3 received suppositories which did not contain the vaccine. The three groups of patients did not differ in mean age, hysterectomy status, sexual activity, or being on antibiotic prophylaxis during weeks 0-4.

DEPR:

The suppository-based vaccine delivery system according to the present invention allows the vaccine to be in contact with the vaginal mucous membrane for a sufficient period of time to enhance the immune response. Further, the suppository-based vaccine delivery system according to the present invention is easily administered, does not require the patient to lie in a supine position for an extended period of time after receiving the vaccination, is suitably administered by the patient, is painless, is amenable to routine urinary tract infections booster vaccination, and allows a favorable method of antigen delivery to immunocompetent cells through the mucosa.

DEPR:

While various embodiments of a suppository-based vaccine delivery system for treating urinary tract infections and a method for treating urinary tract infections in humans have been disclosed, it should be understood that modifications and adaptations thereof will occur to persons skilled in the art. Other features and aspects of this invention will be appreciated by those skilled in the art upon reading and comprehending this disclosure. Such features, aspects, and expected variations and modifications of the reported results and examples are clearly within the scope of the invention where the invention is limited solely by the scope of the following claims.

CLPR:

1. A suppository-based vaccine delivery system for enhancing resistance to urogenital disease in humans, said suppository comprising:

CLPR:

2. A suppository-based vaccine delivery system for enhancing resistance to urinary tract infections in humans, said suppository comprising:

CLPR:

3. The suppository-based vaccine delivery system of claim 2 wherein the inactive bacteria originate from 6 strains of the species Escherichia coli and 1 strain each of Klebsiella pneumoniae, Proteus mirabilis, Proteus morganii, and Streptococcus faecalis.

CLPR:

4. The suppository-based vaccine delivery system of claim 2 wherein the inactive bacteria are present in the total amount of about 1.times.10.sup.9 to about 1.times.10.sup.10 germs.

CLPR:

5. The suppository-based vaccine delivery system of claim 2 wherein the polyethylene glycol suppository base is comprised of polyethylene glycol and polysorbate.

CLPR:

6. The suppository-based vaccine delivery system of claim 5 wherein the

polyethylene glycol suppository base is comprised of about 98% by weight polyethylene glycol and about 2% by weight polysorbate.

CLPR:

7. The suppository-based vaccine delivery system of claim 5 wherein the polyethylene glycol has an average molecular weight of about 3000 to about 5000.

CLPR:

8. The suppository-based vaccine delivery system of claim 2 wherein the polyethylene glycol suppository base comprises from about 80% to about 95% by weight of the suppository.

CLPR:

9. The suppository-based vaccine delivery system of claim 2 wherein the suppository is further comprised of depolarized gelatin.

CLPR:

10. The suppository-based vaccine delivery system of claim 9 wherein the depolarized gelatin is selected from the group consisting of type A gelatin from bovine collagen, type A gelatin from porcine collagen, type B gelatin from bovine collagen, and type B gelatin from porcine collagen.

CLPR:

11. The suppository-based vaccine delivery system of claim 9 wherein the suppository is comprised of about 0.01% to about 0.02% by weight of depolarized gelatin.

CLPR:

12. The suppository-based vaccine delivery system of claim 2 wherein the suppository is further comprised of thimerosal.

CLPR:

13. The suppository-based vaccine delivery system of claim 12 wherein the suppository is comprised of about 0.0005% to about 0.005% by weight of thimerosal.

CLPR:

14. A suppository-based vaccine delivery system for enhancing resistance to urinary tract infections in humans, said suppository comprising:

CLPR:

15. The suppository-based vaccine delivery system of claim 14 wherein the suppository is further comprised of depolarized gelatin and thimerosal, wherein the depolarized gelatin is selected from the group consisting of type A gelatin from bovine collagen, type A gelatin from porcine collagen, type B gelatin from bovine collagen, and type B gelatin from porcine collagen, wherein the suppository is comprised of about 0.01% to about 0.02% by weight of depolarized gelatin, and wherein the suppository is comprised of about 0.0005% to about 0.005% by weight of thimerosal.

CLPV:

(a) a vaccine comprised of inactivated bacteria which originate from cultures of 8 to 14 uropathogenic bacteria strains isolated from the urine of persons suffering from a urinary tract infection of the species: Escherichia coli, Klebsiella pneumoniae, Proteus mirabilis, Proteus morganii, and Streptococcus faecalis, and are present in an amount of about 50 million to about 5 billion germs of each strain per suppository, wherein one-half to three-quarters of the strains used belong to Escherichia coli species; and

CLPV:

(a) a vaccine comprised of inactivated bacteria which originate from cultures of 8 to 14 uropathogenic bacteria strains isolated from the urine of persons suffering from a urinary tract infection of the species: Escherichia coli, Klebsiella pneumoniae, Proteus mirabilis, Proteus morganii, and Streptococcus faecalis, and are present in an amount of about 50 million to about 5 billion germs of each strain per suppository, wherein one-half to three-quarters of the strains used belong to Escherichia coli species, wherein the inactive bacteria originate from 6 strains of the species Escherichia coli and 1 strain each of Klebsiella pneumoniae, Proteus mirabilis, Proteus morganii, and Streptococcus

faecalis, and wherein the inactive bacteria are present in the total amount of about 1.times.10.sup.9 to about 1.times.10.sup.10 germs; and

CLPV:

(a) inserting a suppository-based vaccine delivery system into a bodily orifice of a human, wherein said suppository is comprised of a vaccine comprised of inactivated bacteria which originate from cultures of 8 to 14 uropathogenic bacteria strains of the species: Escherichia coli, Klebsiella pneumoniae, Proteus mirabilis, Proteus inorganii, and Streptococcus faecalis, and are present in an amount of about 50 million to about 5 billion germs of each strain per suppository, wherein one-half to three-quarters of the strains used belong to Escherichia coli species; and polyethylene glycol suppository base; and

CLPV:

(a) inserting a suppository-based vaccine delivery system into a vagina of a human, wherein said suppository is comprised of a vaccine comprised of inactivated bacteria which originate from cultures of 8 to 14 uropathogenic bacteria strains of the species: Escherichia coli, Klebsiella pneumoniae, Proteus mirabilis, Proteus morganii, and Streptococcus faecalis, and are present in an amount of about 50 million to about 5 billion germs of each strain per suppository, wherein one-half to three-quarters of the strains used belong to Escherichia coli species; and polyethylene glycol suppository base; and

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
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3. Document ID: US 6100066 A

L12: Entry 3 of 66

File: USPT

Aug 8, 2000

DOCUMENT-IDENTIFIER: US 6100066 A

TITLE: Nucleic acid molecules encoding Haemophilus somnus proteins

DEPR:

Additional vaccine formulations which are suitable for other modes of administration include suppositories and, in some cases, aerosol, intranasal, oral formulations, and sustained release formulations. For suppositories, the vehicle composition will include traditional binders and carriers, such as, polyalkaline glycols, or triglycerides. Such suppositories may be formed from mixtures containing the active ingredient in the range of about 0.5% to about 10% (w/w), preferably about 1% to about 2%. Oral vehicles include such normally employed excipients as, for example, pharmaceutical grades of mannitol, lactose, starch, magnesium, stearate, sodium saccharin cellulose, magnesium carbonate, and the like. These oral vaccine compositions may be taken in the form of solutions, suspensions, tablets, pills, capsules, sustained release formulations, or powders, and contain from about 10% to about 95% of the active ingredient, preferably about 25% to about 70%.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
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4. Document ID: US 6096320 A

L12: Entry 4 of 66

File: USPT

Aug 1, 2000